

REMARKS/ARGUMENTS

Favorable reconsideration of this Application, as presently amended and in light of the following discussion, is respectfully requested.

This Amendment is in response to the Office Action mailed on September 13, 2005. Claim 1-16 are pending in the Application and Claim 1 stands rejected. Claim 1 is amended and new Claims 2-16 are added by the present Amendment.

In the outstanding Office Action, Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by Heller et al. (U.S. Patent No. 5,779,443, hereinafter "Heller").

Applicants thank Examiner Richard Edgar for the courtesy of an interview extended to Applicants' representative on October 26, 2005. During the interview, amendments to the claim as herein presented were discussed, and arguments as hereinafter developed were presented.

During the interview, Applicants' representative explained that in Heller, the airfoils are stacked by an angular rotation around the trailing edge of the blade, resulting in a blade with a straight trailing edge as explained and illustrated by the reference (Heller, col. 4, lines 42-48; col. 4, line 52 – col. 2, line 10; and FIG. 4). In the instant invention, the airfoils are stacked successively along a stacking axis such that high curvature portions on a suction surface in an airfoil section describe a parabola line that curves toward a pressure side of the airfoil when seen from the front or rear of the turbine nozzle and no rotation about the trailing edge is used. Thus, contrary to what was asserted in the outstanding Office Action, three degrees of rotation in the airfoil of Heller does not correspond to the maximum curvature in the range of 2 to 3% of the height of the airfoil as recited in Claim 1.

No agreement with respect to the claims was reached. Nevertheless, Examiner Edgar indicated on the interview summary (form PTOL-413) that "Applicants' representative

discussed differences between the cited prior art and the instant invention. Clearly demonstrated was the difference in the way the airfoils are stacked. Heller et al. do not seem to disclose the maximum curvature feature claimed.”

Based at least on the foregoing discussion, the instant amendments to Claim 1, and the results of the personal interview, Applicants respectfully submit that the above-summarized rejection is now moot. Its withdrawal is respectfully requested.

Finally, Applicants have submitted new Claims 2-16, which find non-limiting support on the subject matter disclosed as follows: (1) as to new independent Claim 2, support is self-evident from the originally filed claim, Applicants’ specification, and originally filed figures; (2) as to Claims 3, 4, 8, and 9, on page 8, line 17 - page 10, line 26; (3) as to Claims 5-7 and 12-16, on page 11, lines 1-19; and (4) as to Claims 10 and 11, on FIG. 3. Therefore, new Claims 2-16 are not believed to raise a question of new matter.¹ New Claims 8-10 and 12-15 and new Claims 3-7 and 11 depend from Claims 1 and 2, respectively. Claims 8-10 and 12-15 should be allowable at least because of their dependency from Claim 1, which should be allowable as explained.

New independent Claim 2 recites a turbine nozzle, comprising: an inner band; an outer band; and a plurality of airfoils disposed between the inner and outer bands, each airfoil of the plurality having a convex pressure side, a concave suction side, an X axis along a stacking direction, and a Y axis perpendicular to the X axis, the X axis being defined by a straight line connecting first and second points at intersections of the airfoil with the inner and outer bands, respectively, the first and second points defining portions of maximum airfoil curvature on the concave suction side of airfoil cross sections perpendicular to the X axis, and the Y axis intersecting the X axis at a midpoint between the first and second points,

¹ See MPEP 2163.06 stating that “information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter.”

wherein concave suction side profiles defined by cross sections parallel to X-Y planes are parabolic when seen from a front or a rear of the turbine nozzle, and

$$0.02 H \leq Y_{\max} \leq 0.03 H ,$$

where Y_{\max} is the Y coordinate of the midpoint and H is the distance along the X axis between the first and second points.

Applicants respectfully submit that new Claim 2 should be allowable for at least the same reasons that Claim 1 is allowable. Therefore, Applicants respectfully submit that new Claims 2-7 and 11 should also be allowed over all of the references of record.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-16 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representatives at the below listed telephone number.

Respectfully submitted,

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